WE CLAIM:

1. A NO_X removal composition suitable for reducing NO_X emissions during catalyst regeneration in a fluid catalytic cracking process, said composition comprising a microsphere having an average size of from about 20 to 200 microns and composed of (i) a mixed oxide of cerium and zirconium, (ii) optionally, an oxide from the lanthanide series other than ceria, and (iii) optionally, at least one oxide of a transition metal selected from Groups Ib and IIb of the Periodic Table and mixtures thereof.

2. The composition of claim 1 wherein the oxide other than ceria is selected from oxides of La, Nd, Pr, or mixtures thereof.

3. The composition of claim 1 wherein said microsphere is 50 to 100 microns.

4. The composition of claim 1 wherein the mixed oxide (i) contains at least 20% cerium oxide by weight.

5. The composition of claim 1 wherein the mixed oxide (i) contains at least 15 wt % zirconia.

6. The composition of claim 1 wherein said Group Ib and IIb transition metals (iii) are selected from the group consisting of copper, silver, zinc and mixtures thereof.

7. The composition of claim 1 wherein said mixed oxide (i) contains at least 20 % cerium oxide by weight and at least 15% zirconium oxide by weight.

8. The composition of claim 7 wherein said mixed oxide (i) is present in amounts of at least 70% by weight relative to the total of (i), (ii), and (iii).

9. The composition of claim 1 including positive amounts of component (iii).

10. The composition of claim 9 wherein said at least one oxide of a transition metal (iii) is copper oxide.

11. The composition of claim 1 further including (iv) a zeolitic cracking catalyst.

12. The composition of claim 11 wherein said zeolitic cracking catalyst is a synthetic faujasite or ZSM-5.

13. The composition of claim 1 further including separate catalyst particles, said separate catalyst particles comprising a zeolitic cracking catalyst.

14. The composition of claim 13 wherein said zeolitic cracking catalyst comprises a synthetic faujasite of zeolite Y or X, or ZSM-5.

15. The composition of claim 1 wherein components (i), (ii), and (iii) comprise at least 40 weight % of said NOx removal composition.

16. The composition of claim 1 wherein components (i), (ii), and (iii) comprise at least 55 weight % of said NOx removal composition.

17. A method of reducing NO_x emission during fluid catalytic cracking of a hydrocarbon feedstock into lower molecular weight components said method comprising contacting a hydrocarbon feedstock with a cracking catalyst suitable for catalyzing the cracking of hydrocarbons at elevated temperature whereby lower molecular weight hydrocarbon components are formed in the presence of a NO_x reduction composition, wherein said NO_x reduction composition comprises a (i) mixed oxide of cerium and zirconium, (ii) optionally, at least one oxide from the lanthanide series other than cerium and (iii) optionally, an oxide of a transition metal selected from Groups Ib and IIb of the Periodic Table, said NO_x reduction component being present in a sufficient NO_x reducing amount.

18. The method of claim 17 wherein said cracking catalyst and NOx reduction composition are separate particles.

19. The method of claim 17 wherein said cracking catalyst and NOx reduction composition are present as an integral combination of the cracking catalyst component and the NOx reduction composition component in a single particle.

20. The method of claim 17 wherein said cracking catalyst is fluidized during contact with a hydrocarbon feedstock.

21. The method of claim 17 further comprising recovering used cracking catalyst from said contacting step and treating said used catalyst under conditions to regenerate said catalyst.

22. The method of claim 17 wherein said hydrocarbon feedstock contains at least 0.1 wt % nitrogen.

23. The method of claim 17 wherein said mixed oxide (i) contains at least 20 % cerium oxide by weight and at least 15% zirconium oxide by weight.

24. The method of claim 17 wherein said NOx reduction component includes positive amounts of component (iii).

25. The method of claim 24 wherein said at least one oxide of a transition metal (iii) is copper oxide.

26. The method of claim 17 wherein said NOx reduction component includes positive amounts of component (ii).

27. The method of claim 26 wherein (ii) comprises oxides of La, Nd, Pr, or mixtures thereof.

28. The method of claim 18 wherein components (i), (ii), and (iii) comprise at least 40 weight % of said NOx removal composition.

29. The method of claim 18 wherein components (i), (ii), and (iii) comprise at least 55 weight % of said NOx removal composition.

30. The composition of claim 23 wherein said mixed oxide (i) is present in amounts of at least 70% by weight relative to the total of (i), (ii), and (iii).